

Form PTO-1449 U.S. Department of Commerce
Patent and Trademark Office

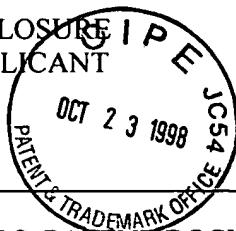
Atty. Docket No.

Serial No.

27987-208414

09/099,632

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT



Applicant

THOMAS I. INSLEY et al.

Filing Date

Group

June 18, 1998

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>JS</i>		4,668,558	05/26/87	Barber	—	—	
		4,871,623	10/03/89	Hoopman et al.	—	—	
		4,950,549	08/21/90	Rolando et al.	—	—	
		5,069,403	12/03/91	Marentic et al.	—	—	
		5,070,606	12/10/91	Hoopman et al.	—	—	
		5,078,925	01/07/92	Rolando et al.	—	—	
	✓	5,133,516	07/28/92	Marentic et al.	—	—	
	✓	5,158,557	10/27/92	Noreen et al.	—	—	
		5,175,030	12/29/92	Lu et al.	—	—	
		5,200,248	04/06/93	Thompson et al.	—	—	
		5,249,358	10/05/93	Tousignant et al.	—	—	
		5,317,805	06/07/94	Hoopman et al.	—	—	
		5,450,235	09/12/95	Smith et al.	—	—	
		5,514,120	05/07/96	Johnston et al.	—	—	
		5,527,588	06/18/96	Camarda et al.	—	—	
		5,691,846	11/25/97	Benson Jr. et al.	—	—	

FOREIGN PATENT DOCUMENTS

Name	Document Number	Date	Country	Class	Subclass	Translation Yes/No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>JS</i>		Product Literature: Kernforschungszentrum Karlsruhe, "Metal Micro Heat Exchangers," DATE UNKNOWN.
<i>JS</i>		Article by: Peter Zuska, "Microtech Opens Doors To The Universe Of Small Space", Med Device & Diagnostic Industry, Jan. 1997; pg 131-137.
<i>JS</i>		Article by: Ottow et al; "Processing of 3D Microstructures Using Macroporous n-Type Silicon", J. Electrochem. Soc., Vol. 143, No. 1, Jan 1996; pg 385-390.
<i>JS</i>		Article by: Bier et al. "Gas to gas heat transfer in micro heat exchangers", Chem. Engineering & Processing; 32 (1993) 33-43, 1993.

M2:20203188.01

Leonard A. Joo *12/6/99* *3/26/00*



INFORMATION DISCLOSURE STATEMENT

Serial No.: 09/099,632

Filing Date: June 18, 1998

Group: 3743

[illegible][illegible]

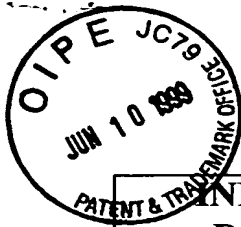
Date Considered

Leonard n Leo

12/6/99

Patent and Trademark Office, U.S. Department of Commerce

q:\3mip co forms and samples\ids pto form 1449.doc 4/1/99



OMB No. 0651-0011

INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: 53634USA8A.002	Serial No.: 09/099,632
	Applicant(s): Thomas I. Insley et al.	
	Filing Date: June 18, 1998	Group: 3743

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate
<i>[Signature]</i>	4,906,439	3/6/90	Grenner	422	56	12/21/87
<i>[Signature]</i>	5,842,787	12/1/98	Kopf-Sill et al.	366	340	10/9/97
<i>[Signature]</i>	5,885,470	3/23/99	Parce et al.	216	33	4/14/97

FOREIGN PATENT DOCUMENTS

Document Number	Date of Publication	Country	Class	SubClass	Translation	
					Yes	No

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

EXAMINER <i>Leonard A. Joo</i>	Date Considered <i>12/6/99</i>
--	--

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Based on Form PTO-FB-A820

Patent and Trademark Office, U.S. Department of Commerce

(Also form PTO-1449)

q:\3mip co forms and samples\ids pto form 1449.doc 4/1/99

OMB No. 0651-0011

INFORMATION DISCLOSURE STATEMENT

Atty. Docket No.:

Serial No.:

53634USA8A.002

09/099,632

Applicant(s):

Thomas I. Insley et al.

Filing Date:

June 18, 1998

Group:

3743

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

EXAMINER

Leonard & Leo

Date Considered

12/6/99

***Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

Based on Form PTO-FB-A820

Patent and Trademark Office, U.S. Department of Commerce

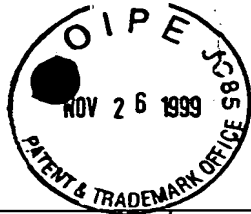
(Also form PTO-1449)

q:\3mip co forms and samples\ids pto form 1449.doc 4/1/99

* substantial duplicate of US 4,871,623

* see PTO 1449 filed 1/10/00 with translation

RECEIVED
OCT -5 1999
TECHNOLOGY CENTER 3700



11

OMB No. 0651-0011

INFORMATION DISCLOSURE STATEMENT		Atty. Docket No.: 53634USA8A.002		Serial No.: 09/099,632			
		Applicant(s): Thomas I. Insley et al.		Filing Date: June 18, 1998			
		Group: 3743					
U.S. PATENT DOCUMENTS							
Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date (If Appropriate)	
/	3,520,300	7/14/70	Flower, Jr.	—	—	—	
	3,993,566	11/23/76	Goldberg et al.	210	433 M	4/8/75	
	4,413,407	11/8/83	Columbus	29	825	11/9/81	
	4,533,352	8/6/85	Van Beek et al.	604	317	3/7/83	
	4,579,555	4/1/86	Russo	604	282	12/5/83	
	4,601,861	7/22/86	Pricone et al.	264	1.6	8/10/84	
	4,639,748	1/27/87	Drake et al.	346	140 R	9/30/85	
	4,677,705	7/7/87	Schuster	15	398	3/17/86	
	4,758,481	7/19/88	Fauvel	429	39	3/13/86	
	4,913,858	4/3/90	Miekkka et al.	264	1.3	10/3/88	
	5,014,389	5/14/91	Ogilvie et al.	15	353	11/15/89	
	5,176,667	1/5/93	DeBring	604	356	4/27/92	
	5,376,252	12/27/94	Eström et al.	204	299 R	11/10/92	
	5,411,858	5/2/95	McGeehan et al.	435	4	8/12/93	
	5,437,651	8/1/95	Todd et al.	604	313	9/1/93	
	5,457,848	10/17/95	Miwa	15	346	10/22/93	
	5,534,576	7/9/96	Grot	524	377	4/17/90	
	5,601,678	2/11/97	Gerber et al.	156	150	1/23/95	
	5,628,735	5/13/97	Skow	604	317	1/11/96	
	5,651,888	7/29/97	Shimizu et al.	210	321.64	2/14/96	
5,692,263	12/2/97	Sorenson	15	415.1	6/2/95		
5,703,633	12/30/97	Gehrer et al.	347	86	8/19/94		
FOREIGN PATENT DOCUMENTS							
	Document Number	Date of Publication	Country	Class	SubClass	Translation	
						Yes	No
/	EP 0 039 291 A*	4/11/81	EPO	—	—	X	
/	DE 42 10 072 A1	3/25/93	Germany	—	—		X
/	DE 195 01 017 A*	7/25/96	Germany	—	—	X	
/	1 338 579	11/28/73	Great Britain	—	—	X	
	1 418 635	12/24/75	Great Britain	—	—	X	
	WO 89/04628	6/1/89	WIPO	—	—	X	
	WO 97/02357	1/23/97	WIPO	—	—	X	
	WO 97/13633	4/17/97	WIPO	—	—	X	
	WO 98/00231	1/8/98	WIPO	—	—	X	
/	WO 98/24544	6/11/98	WIPO	—	—	X	
OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)							
EXAMINER			Date Considered				
Leonard A. Leo			3/26/00				
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Based on Form PTO-FB-A820
(Also form PTO-1449)

Patent and Trademark Office, U.S. Department of Commerce

* see PTO-1449 filed 1/10/00 with translation

INFORMATION DISCLOSURE STATEMENT (Form PTO 1449)	Atty. Docket No.: 53634USA8A.002	Serial No.: 09/099,632
	Applicant(s): Thomas I. Insley et al.	
	Filing Date: June 18, 1998	Group: 3743

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	SubClass	Translation	
						Yes	No
<i>SP</i>	DE 42 10 072 A1	3/25/93	Germany	—	—	X	
<i>SP</i>	DE 32 12 295 A1	10/6/83	Germany	—	—	X	

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

EXAMINER

Date Considered

*Leonard A. Lee**3/26/00*

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Based on Form PTO-FB-A820
PTO-1449)

Patent and Trademark Office, U.S. Department of Commerce (Also form

TECHNICAL CENTER 3700

JUN 12 2000

RECEIVED



Form PTO-1449 U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.	Serial No.
27987-208414	09/099,632
Applicant	
THOMAS I. INSLEY et al.	
Filing Date	Group
June 18, 1998	

SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>[initials]</i>	3,715,192	2/6/1973	Wenz et al.	—	—	
<i>[initials]</i>	4,233,029	11/11/1980	Columbus	—	—	
<i>[initials]</i>	4,271,119	6/2/1981	Columbus	—	—	
<i>[initials]</i>	4,277,966	7/14/1981	Rambauske	—	—	
<i>[initials]</i>	4,758,481	7/19/1988	Fauvel	—	—	
<i>[initials]</i>	5,205,348	4/27/1993	Tousignant et al	—	—	
<i>[initials]</i>	5,249,359	10/5/1993	Schubert et al.	—	—	
<i>[initials]</i>	5,440,332	8/8/1995	Good	—	—	
<i>[initials]</i>	5,728,446	3/17/1998	Johnston et al.	—	—	
<i>[initials]</i>	5,932,315	8/3/1999	Lum et al.	—	—	

RECEIVED
MAR - 3 2000
TC3700 MAIL ROOM

FOREIGN PATENT DOCUMENTS

Name	Document Number	Date	Country	Class	Subclass	Translation Yes/No
<i>[initials]</i>	DE 195 01 017	7/25/1996	Germany	—	—	Yes
<i>[initials]</i>	WO 93/11727	6/24/1993	PCT WIPO	—	—	Yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>[initials]</i>	Article: "Fabrication of Novel Three-Dimensional Microstructures by the Anisotropic Etching of (100) and (110) Silicon", Ernest Bassous, <u>IEEE Transactions on Electron Devices</u> , Vol. ED-25, No. 10, October 1978
<i>[initials]</i>	Article: "Simple and Low Cost Fabrication of Embedded Micro-Channels by Using a New Thick-Film Photoplastic" Guerin, et al. Digest of Technical Papers, Vol. 2, June 1997
<i>[initials]</i>	Article: "Fabrication of Microstructures with high aspect ratios and great structural heights by synchrotron radiation lithography, galvanofarming, and plastic moulding (LIGA process)" Becker, et al. <u>Micromicroelectronic Engineering</u> 4 (1986)
<i>[initials]</i>	Article: "UV Laser Machined Polymer Substrates for the Development of Microdiagnostic Systems" Roberts, et al. <u>Analytical Chemistry</u> , Vol. 69, No. 11, June 1997

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

M2:20295152.01

Leonard A Leo

3/26/00

* previously cited on PTO 1449 filed 11/20/99